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(54) **METHOD AND SYSTEM FOR THE
SELECTIVE OXIDATIVE
DECARBOXYLATION OF FATTY ACIDS**

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(58) **Field of Classification Search**

USPC 585/240
See application file for complete search history.

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(57) **ABSTRACT**

Selective, radically initiated oxidative decarboxylation may
produce low viscosity renewable fuels from biologically
derived fats and oils. Fatty acids and triglycerides may be
decarboxylated using oxidants at a water/oil interface. The
oxidants may be produced using photo-Fenton reagents. The
reaction advantageously can be carried out at room tempera-
ture and pressure and has fewer unwanted byproducts than
traditional decarboxylation techniques.

32 Claims, 2 Drawing Sheets

